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April 21, 2017

Submittal
Final Remedial Design Work Plan (RDWP) and Leading Edge Investigation Work Plan (LEIWP)
Responding to EPA Comments from April 10, 2017
Operable Unit 2 Omega Chemical Superfund Site

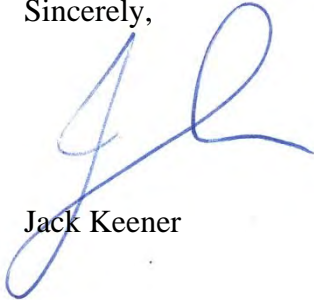
Dear Wayne:

This letter has been prepared to provide Final versions of both the Remedial Design Work Plan and the Leading Edge Investigation Work Plan along with the April 10, 2017 Response to Comment package. Specifically, based on the explicit request in your April 10 email and our follow-up discussion, we have removed certain information on SWD-identified potentially contaminated properties from Table 1 and Figure 5 of the RDWP and from Table 2 and Figure 8 of the LEIWP. We have also removed certain corresponding text from the work plans. As we have explained to EPA, SWDs believe this information on potential source properties is relevant to work that we will perform to implement the recently entered OU2 CD and ensure its long-term effectiveness. We have also removed Figure 6 and the accompanying text from the RDWP that discussed the work we had done to identify the potential impact of sewer releases in the OU2 area. We had investigated the sewers as potential shallow groundwater sources due to the significant impact of the 1987 Whittier earthquake in this area.

SWDs collected this set of information specifically because we believed it would help us implement the 2016 OU2 CD in a timely and effective manner and because continuing to identify OU2 source properties and obtaining source control at properties that continue to impact OU2 groundwater is important for long-term groundwater cleanup in this area. In the interest of moving forward to implement the CD, we have accepted your work plan comments on the issue of potential source properties. However, we do not agree with your view that this potential source information is not relevant to the development of a site conceptual model and to the direct implementation of the obligations of the CD. We also do not agree that the Main COCs are the only COCs of interest and are the primary basis for identifying potential sources relevant to OU2 remediation. There are many groundwater contaminants in OU2 that exceed screening levels or notification levels and the presence of these COCs may affect remedy design and measurement of remedy effectiveness. Limiting the identification of potential sources to ones that contributed Main COCs to OU2 groundwater is not consistent with the scope of the required remedy and the long-term effectiveness of remedial actions for OU2.

As the only major PRPs that have moved forward to work cooperatively with EPA as work parties for OU2, we hope that in the future we can find a more constructive way to resolve differences of opinion over work issues. We have included as an attachment to this transmittal letter for the final RDWP and the LEIWP, the more complete version of Table 1 and Figure 5 (RDWP), Figure 6 (RDWP), and Table 2 and Figure 8 (LEIWP). These more complete versions of the SWD-preferred Tables and Figures will allow us to continue to have the full set of potential source information available in a single location.

Sincerely,



Jack Keener

Cc Gene Lucero

Nancy Wilms

Bob Antonopolis

Jim Fleer

Marcia Williams

Hope Schmeltzer

Attachments

SWD RTC Table for EPA Comments from December 2016 through April 10, 2017 on the PDIWP, RDWP, and LEIWP

SWD-Preferred RDWP Table 1 and Figures 5 and 6

SWD-Preferred LEIWP Table 2 and Figure 8

	EPA COMMENT (December 2016)	SWD RESPONSE (February 10, 2017)	EPA COMMENT (March 3, 2017)	SWD RESPONSE (March 8, 2017)	EPA RESPONSE (March 23, 2017)	SWD RESPONSE (April 4 2017 as modified on April 12 2017 based on April 5 call with EPA and April 10 EPA email)
Pre-Design Investigation Work Plan (PDI WP)						
PDIWP #5, Pg. 8, Section 2.3	Please modify or delete the portion of the second sentence that refers to the facilities under State oversight as “a subset of known sources” and the third sentence (which starts with “However, a large number ...”). The latter sentence expresses an opinion, not a fact.	As noted in our transmittal letter, the SWDs have concerns regarding EPA’s request to delete SWD proposed background information on potential sources in and adjacent to OU2 and are requesting a meeting to discuss the EPA comments on this topic.		On February 27, 2017, SWDs provided a detailed letter explaining our technical rationale for the inclusion of information on other known or potential sources in or adjacent to OU2. Per our follow-up discussion on February 28, SWDs have modified the source property language in the PDIWP to summarize the technical basis for including the source property discussion in Section 2.3. SWDs have also clarified the references to known vs. potential sources.	<p>We agree that there may be other sources of groundwater contamination at the Site beyond those identified to date by EPA. We propose the following changes to the second sentence in Section 2.3:</p> <p>A subset of the known sources that have contributed to the OU2 groundwater contamination are There has been significant industrial activity in the NE/CE area over the last several decades. There are properties currently under State oversight (DTSC or RWQCB-LA) and are currently being addressed by State-led actions. others not yet identified by EPA or the State that may have contributed to OU2 groundwater contamination.</p> <p>Our preference is to delete the third sentence in Section 2.3. If, however, the SWDs would like to keep this sentence, we propose the following change:</p> <p>However, The SWDs assert that a large number of the potential</p>	See redline text for SWD language. We have made what we believe should be acceptable edits to EPA’s proposed language.
PDIWP #9, Pg. 13, 1st bul.	Please modify the discussion of Freon sources and occurrence as in the final version of the WAMP.	The language has been revised to read as it appears in the approved WAMP with the addition of a sentence at the end of the bulleted paragraph: <i>Freon 11 and Freon 113 were detected at lower concentrations and within the overall extent of OU2 areas of PCE and TCE detections. Freon 11 and Freon 113 were known to be used by businesses in OU2 and the types of businesses known to operate currently and historically in OU2 were the types of businesses that frequently utilized Freons. Freons are ubiquitous</i>	We do not think the plans should identify other parties and imply that they are sources of Freon to the regional groundwater contamination. (Response also applies to comments PDIWP, #A6, PDIWP, #A7, RDWP, #14, LEIWP, #5/6.)	Given the use of Freon as a fingerprinting compound by EPA for determination of the extent of the OU2 Plume, SWDs believe it is relevant to note that these compounds were commonly used by entities within and adjacent to OU2. This is similar to the SWD language in the WAMP. The last sentence of the PDIWP revised language is written to provide examples of sites where Freon 11 or Freon 113 has been identified in	<p>General statements about the use of Freons are acceptable but it is inappropriate to provide “example” parties and thereby imply that the party is a source of Freon to the regional groundwater contamination.</p> <p>Please modify the last sentence as follows: “Freon 11 or Freon 113 have been found in soil or soil vapor at various properties within OU2 including, but not limited to, the Omega property, the McKesson property, the Chrysler property, and the Patsouras property.”</p>	We have removed the list of examples. (Note that the properties were identified merely to demonstrate that use of Freons were common within the OU2 area.)

		<i>compounds, and Freon 11 and Freon 113 uses included dry cleaning, cold cleaning electrical parts, vapor phase cleaning, photographic film and magnetic tape cleaning, use in refrigerants, use in blowing agents, use in oil field activities, use in fire extinguishing, and use in propellants. Freon was also commonly found in both automotive and industrial waste oils. Freon 11 or Freon 113 have been found in soil or soil vapor at various properties within OU2 including, but not limited to, the Omega property, the McKesson property, the Chrysler property, and the Patsouras property.</i>		soil or soil vapor below the named property, based on publically available data. The text does not conclude whether or not these example properties are known sources of Freon in groundwater. However, given Freon use and release to the subsurface at the example properties, each of these properties is a potential Freon source to groundwater. SWD's response to PDIWP #A6, PDIWP #A7, RDWP #14, and LEIWP #5/6 is similar to our response to PDIWP #9 above.		
PDIWP #23, Table 6	Were analytes from EPA's Unregulated Contaminant Monitoring Requirement considered, particularly perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), which are addressed in a May 2016 EPA Drinking Water Health Advisory?	The EPA's Unregulated Contaminant Monitoring Requirements were not explicitly considered. However, to the degree that an unregulated contaminant is also listed in the example RWQCB NPDES or WDR permits, it is included in the groundwater analyte list. PFOA and PFOS are not included in either of the example permits and therefore are not included as groundwater monitoring analytes. No changes are proposed to the PDIWP at this time.			We are not insisting that additional analytes be added at this time but note that monitoring of additional chemicals may be appropriate in the future to reflect new information on the prevalence or toxicity of potential contaminants.	No change in work plan text is necessary.
PDIWP #A6, Pg. A-11, 2nd bul.	The Plan states that "Freon 113 has been infrequently analyzed at sites within OU2 but it was commonly found in soil, soil gas, or groundwater at sites where	Same as response to PDIWP comment #9 above.	-----	-----	Please see response for PDI WP comment #9.	EPA change has been made.

	it was analyzed." Please delete this statement as in the final version of the WAMP.					
PDIWP #A7, Pg. A-11, 2nd bul.	The Plan states that "Freon 11 was more frequently analyzed and was found in at least one environmental medium at those properties where it was tested for." Please delete this statement as in the final version of the WAMP.	Same as response to PDIWP comment #9 above.	-----	-----	Please see response for PDI WP comment #9.	EPA change has been made.
PDIWP #A11, Pg. A-13, Sec. 4.1.1, 3rd par	There appears to be very limited data available upgradient of Telegraph Road in the western portion of the Central Extraction (CE) Area to define both the target extraction area and potential water quality impacts to extracted water quality. This data gap is particularly apparent in the deeper units/aquifers of interest. Please comment on the value of adding one or more additional monitoring wells to help close this data gap.	We agree with the statement regarding available data in the referenced area. The western portion of the proposed PDI monitor transect in the CE Area is designed to address this data gap, but it is possible (thought to be unlikely) that an additional well cluster could be required as it pertains to definition of the target extraction area. Recognizing this potential, we would recommend a contingency well cluster that would be installed if the COCs in groundwater samples collected from all of the proposed PDI monitor wells at clusters CE-2 and/or CE-3 are below the respective MCL (or NL in the case of 1,4-dioxane). If this were to occur, three monitor wells would be installed at CE contingency location CCE-6 which would be located on Smith Avenue in the vicinity of the railroad We believe this would address this potential data gap as it pertains to definition of the target extraction area. We also acknowledge that an additional monitor well cluster may be required in this	We agree with the proposal to add a contingent well cluster CE-6 to the north and west of EPA monitor well MW20. EPA and the SWDs should plan to discuss the need for and location of CE-6 after data are available from CE-1 to CE-3. We believe there could be scenarios other than the one described in the response (e.g., all COCs below MCLs/NLs in CE-2 and/or CE-3) that warrant installation of CE-6.	The language in the PDIWP provides for the location and analysis of contingent wells to fill data gaps that will support remedial design. No additional modification to the work plan text is required.	We agree with the proposal to add a contingent well cluster CE-6 to the north and west of EPA monitor well MW20. SWDs should plan to discuss with EPA the need for and location of CE-6 after data are available from CE-1 to CE-3 and the SWDs have determined whether they intend to propose a western CE capture zone boundary to the east of the OU2 boundary. There may be scenarios other than the one described in the response (i.e., all COCs below MCLs/NLs in CE-2 and/or CE-3) that warrant installation of CE-6.	No change in work plan text is necessary.

		<p>area to monitor potential water quality impacts during operation of the Remedial Action (RA). We would recommend that this monitor well cluster be installed as part of the RA monitoring network, to the extent required based on final design of the remedy.</p> <p>The PDIWP, Appendix B, and Appendix C have been revised to include the contingency plan for installing well cluster CCE-6, as described below...</p>				
PDIWP #B2, Pg. B-8, Sec. 3.2, PS1/PS2	<p>Figures in Appendix A (e.g., Figure A-5A and A-6B, Gage Aquifer) indicate that contaminant concentrations in groundwater to the east of the planned CE Area, along and near the OU2 boundary, exceed MCLs. To better define the eastern edge of the CE target area, we recommend an additional groundwater monitoring well cluster to the east of the proposed well cluster CE-5 and relocating CE-5 slightly westward.</p>	<p>Given the groundwater conditions identified in the RI report (refer to RI Report Figure 5-29), we believe the existing proposed monitor wells are sufficient to support remedial design. For example, if the concentrations of COCs exceed MCLs (or the NL in the case of 1,4-dioxane) at CE-5, then the CE wellfield will be designed to capture groundwater to the OU2 boundary to the east. This effectively negates the need for additional monitor well installation to the east of CE-5. No changes are proposed to the PDIWP at this time.</p>	<p>Similar to the west side of the CE, there are scenarios where EPA may seek another monitoring well cluster on the east side; probably north of CE-5 and east of MW-26. One such scenario would be contaminant concentrations at CE-5 below MCLs/NLs, and a SWD proposal to place the eastern edge of the CE target area to the west of the OU2 boundary.</p>	<p>The language in the PDIWP provides for the location and analysis of contingent wells to fill data gaps that will support remedial design. No additional modification to the work plan text is required.</p>	<p>As discussed above for the west side, EPA may seek another monitoring well cluster on the east side, north of CE-5 and east of MW-26. One scenario is contaminant concentrations at CE-5 below MCLs/NLs, and a SWD proposal to place the eastern CE capture zone boundary to the west of the OU2 boundary.</p>	<p>No change in work plan text is necessary.</p>
PDIWP #C5, Pg. C-26, Sec. 4.9.2, last par.	<p>The text states that field blanks "...will be submitted each day that sampling is conducted for analysis of VOCs." Please confirm that either field blanks or equipment blanks will be analyzed for all COCs, not just VOCs.</p>	<p>Trip blanks and field blanks will be analyzed for VOCs only. Equipment/rinsate blanks will be analyzed for all COCs, not just VOCs. The first sentence in Section 4.9.2, 4th paragraph has been revised and now reads: <i>When dedicated sampling equipment is used, one field blank water sample will be submitted each day that sampling is conducted for</i></p>	<p>The February 10 response says that <i>"Field blank samples will be analyzed for VOCs" and that "For each day that sampling is conducted for analysis of VOCs, collect one field blank sample each day or collect one field blank sample for every 10 samples collected,</i></p>	<p>Equipment rinsate blanks will be analyzed for all analytes applied to the samples collected with the subject equipment (both VOCs and non-VOCs). Equipment rinsate blanks are used to verify that the field team properly decontaminated portable, non-dedicated sampling equipment.</p>	<p>Please confirm that, if an equipment rinsate blank is not collected on a sampling day, a field blank will be collected and analyzed for all COCs. Also, EPA only requires one field blank per day, even if more than 10 samples are collected for analysis.</p>	<p>We confirm that if an equipment rinsate blank is not collected on a sampling day, a field blank will be collected and analyzed for all COCs.</p>

		<p><i>analysis of VOCs.</i></p> <p>The last two sentences in Section 4.9.2, 4th paragraph have been revised and now read: <i>If sampling equipment is decontaminated and reused in the field (e.g., a temporary pump), an equipment blank will be collected and analyzed for COCs.</i> The Quality Assurance section of the Groundwater Collection SOP has also been revised. On Page C1-61, Section 12.9, 2nd bullet, 2nd sentence the text has been revised and now reads: <i>Equipment rinsate samples will be analyzed for COCs.</i> On Page C1-61, Section 12.9, 3rd bullet, 1st sentence: the text has been revised and now reads:</p> <p><i>For each day that sampling is conducted for analysis of VOCs, collect one field blank sample each day or collect one field blank sample for every 10 samples collected, whichever is more frequent. Field blank samples will be analyzed for VOCs. Sampling personnel will prepare...</i></p>	<p><i>whichever is more frequent.”</i></p> <p>If an equipment blank is not collected on a sampling day, the field blank should be analyzed for all COCs. Also, EPA only requires collection of one blank sample per day regardless of whether it is a field blank or equipment blank, even if more than 10 samples are collected for analysis</p>	<p>Equipment rinsate blanks are collected by pouring reagent-grade deionized water provided by the laboratory, over the decontaminated sampling equipment used that day. The rinsate blanks that are collected are analyzed for the same analytes as the samples collected with the non-dedicated equipment, both VOCs and non-VOCs. Conversely, field blanks are passively collected during VOC sampling to assess potential background contamination in the ambient environment. Field blank samples are obtained by filling a clean sampling container in the field, at a pre-determined sampling location, with reagent-grade deionized water provided by the laboratory. The sample container is allowed to be exposed to ambient conditions in the same manner that the primary samples are exposed, while the planned VOC sampling is occurring. The field blank sample container is sealed and submitted for VOC analysis with the primary VOC samples.</p> <p>Although EPA only requires one type of blank per day, in order to account for the differing</p>		
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				<p>types of potential cross-contamination (i.e., inadequate portable equipment decontamination or ambient air contamination), the plans allows for both equipment rinsate and field blanks to be collected on the same day, if needed. This would occur if both dedicated and non-dedicated sample equipment were used in the same day that VOC sampling occurred. Sample planning will occur in advance of mobilization so the sampling crew will have foreknowledge of the needed QC samples, and will be prepared to collect the needed samples. This has been clarified in text changes in section 4.9 of the PDI Work</p> <p>Plan, Appendix C, and in section 10 of the Leading Edge Investigation Work Plan, Appendix B.</p>		
Remedial Design Work Plan (RD WP)						
RDWP #9, Pgs. 7-10, Sections 2.6, 2.6.1, 2.6.2, 2.6.3	Please make similar changes to these sections, and associated tables and figures, as are made to Section 2.3 of the LEI Work Plan. We do not believe that Section 2.6.3 is necessary or appropriate to the Plan, and should be deleted.	As noted in our transmittal letter, the SWDs have concerns regarding EPA’s request to delete SWD proposed background information on potential sources in and adjacent to OU2 and are requesting a meeting to discuss the EPA comments on this topic.	If the plan continues to make reference to the properties identified in the 2010 RI report as “known or potential sources,” it should note that the properties may be listed for contaminants other than the chemicals of concern at the Omega Chemical	On February 27, 2017, SWDs provided a detailed letter explaining our technical rationale for the inclusion of information on other known or potential sources in or adjacent to the RDWA. Per our follow-up discussion on February 28, SWDs have modified the source	See proposed changes at end of letter (following comments and responses on the RD WP). Our changes are intended to: - Remove statements highlighting specific facility investigations. (We do not believe that highlighting specific facilities is necessary or appropriate and are concerned that the statements could be misinterpreted to imply liability.)	See redline text for SWD changes in Section 2.6 and subsections. <ul style="list-style-type: none">• In Section 2.6, SWDs have made changes consistent with the edits to EPA’s proposed language that the SWDs made in the PDI work plan discussion on potential sites.• In Section 2.6.2, we have made modifications to address the EPA comment but we have discussed the difference between Omega property COCs and COPCs in OU2. Both are relevant for OU2 remedy implementation. We have accepted other redline provided by EPA.

			<p>site.</p> <p>We would like to see Section 2.6.3, Figure 5, and Table 2 deleted. If this section is not deleted, the facilities should be limited to those in the RD Work Area and described as what they are -- facilities overseen by DTSC or the Regional Board and/or facilities listed in EnviroStor and/or GeoTracker - rather than as potential sources. It should also be noted that many of the properties are included for contaminants other than the chemicals of concern at the Omega Chemical site. We do not think it is appropriate to list, describe, or depict in the Plans other facilities or systems (e.g., sanitary sewers) as potential sources (i.e., the last paragraph in Section 2.6.3, which refers to other possible sources identified by the SWDs).</p>	<p>property language in all the work plans to summarize the technical basis for including the source property discussion (including the sanitary sewer discussion). SWDs have also clarified references to known vs. potential sources, responded to specific EPA questions on individual source properties, and further limited the number of identified source properties adjacent to, but outside of, the OU2 boundary. SWDs have not eliminated potential sites based solely on the current identification of contaminants since such information is not definitive for potential sources and because SWDs may need to treat a broader set of contaminants than identified Omega Superfund Site COCs. Note that for the RDWP it is Table 1, not Table 2 that lists known and potential source properties and that has been updated.</p>	<p>- Clarify that facilities may have been listed in the 2010 RI Report, GeoTracker or EnviroStor for contaminants other than the Omega Chemical Site COCs.</p> <p>In addition to the text changes provided after this table, we request the following changes to RDWP Table 1, Figure 5, and Figure 6:</p> <p>i) Change titles and notes to refer to “facilities included in the GeoTracker database, EnviroStor database, or identified as known or potential sources in the 2010 RI Report.” (Do not refer to facilities as potential sources.)</p> <p>ii) Remove facilities not listed in the 2010 RI Report, GeoTracker, or EnviroStor.</p> <p>iii) Include a note that properties listed in GeoTracker or EnviroStor have not necessarily contaminated groundwater, and may be listed for contaminants other than the Omega Chemical Site COCs.</p> <p>iv) Include a note that properties included in the 2010 RI Report may be listed for contaminants other than the Omega Chemical site COCs.</p> <p>v) Delete Figure 6</p>	<ul style="list-style-type: none"> • In Section 2.6.3, we have attempted to address EPA comments on COCs although with modifications to address the difference between Main COCs and COPCs that will need to be contained as part of the OU2 remedy. [Note that the work plans define Site and define Omega Property but the work plans do not use the term “Omega Chemical site.”) SWDs have also deleted the discussion of potential sewer releases and Figure 6 although we believe it is relevant given our investigation into the impacts of the 1987 Whittier earthquake. SWDs cannot accept EPA’s proposed deletion of the potential for sites outside the OU2 boundary to have <u>potentially</u> adversely impacted the regional gw in OU2 or in the RDWA. • SWDs do not agree that the list of properties/facilities identified by SWDs over the last 5 years as potential sources should be deleted from Figure 5 and Table 1. We believe it is important to keep track of these locations when we are implementing the RDWP and the remedy. There is no reasonable basis to exclude them as potential sites. However, at EPA’s request we have removed the SWD-identified sites that are not in Geotracker or EnviroStor from the relevant Table and Figure and have incorporated our version of the Table and Figure as an attachment to the transmittal letter for the Final RD Workplan. • SWDs do not believe that the title of Table 1 and Figure 5 require changing. We do not see an issue with stating that these are Potential Sources since we have already noted that many potential sources have not yet been adequately evaluated; without such evaluation, one clearly can’t reach a liability determination. Calling something a potential source is not implying any liability threshold has been met. That is true for Geotracker and EnviroStor locations as well as SWD identified properties. However, based on EPA’s April 10 email, SWDs have made EPA’s requested title change for the version of the Table and Figure in the Final RD Work Plan. We have attached the SWD Table and Figure to the transmittal letter with the title preferred by SWDs.
RDWP #14,	Please modify this paragraph as in final version	The language has been revised to read as it appears			Please see response for PDI WP comment #9.	EPA change has been made.

Pg. 16, 2nd bullet	of the WAMP.	<p>in the approved WAMP with the addition of a sentence at the end of the bulleted paragraph:</p> <p><i>Freon 11 and Freon 113 were detected at lower concentrations and within the overall extent of OU2 areas of PCE and TCE detections. Freon 11 and Freon 113 were known to be used by businesses in OU2 and the types of businesses known to operate currently and historically in OU2 were the types of businesses that frequently utilized Freons. Freons are ubiquitous compounds, and Freon 11 and Freon 113 uses included dry cleaning, cold cleaning electrical parts, vapor phase cleaning, photographic film and magnetic tape cleaning, use in refrigerants, use in blowing agents, use in oil field activities, use in fire extinguishing, and use in propellants. Freon was also commonly found in both automotive and industrial waste oils. Freon 11 or Freon 113 have been found in soil or soil vapor at various properties within OU2 including, but not limited to, the Omega property, the McKesson property, the Chrysler property, and the Patsouras property.</i></p>				
RDWP #19, Pgs. 21-22, Section 3.2, 1st par	<p>The 2nd sentence refers to the 2016 ESD, then the 3rd sentence begins:</p> <p>“Therefore, reinjection (shallow or deep), basin recharge, and reclamation will be the end uses to be evaluated during RD...” The</p>	<p>No change is proposed to the plan text.</p> <p>While the SWDs acknowledge that the ROD and ESD allow for a drinking water end use, SWDs do not plan to evaluate it further. Importantly, the</p>			<p>We disagree that a drinking water end use would necessarily cause “significant delay.” Other end uses will also require permitting and/or third party participation, which could require a significant amount of time. No changes to the plan are needed.</p>	<p>No change in work plan text is necessary. We note that this EPA comment is inconsistent with the significant work performed by SWDs on the OU2 water end use options and previous discussions with EPA on this issue.</p>

	decision to evaluate the three end uses during RD is also the result of the Settling Defendant disinterest in further evaluating potable use of the treated water.	SWDs have expended substantial effort in evaluating Stakeholder acceptance and potential partnerships to facilitate a drinking water end use and also engaged in discussions with drinking-water permitting agencies. The results of these discussions indicate that pursuing a drinking water end use would cause a significant delay in remedy implementation.				
RDWP #20, Pg. 22, Section 3.2, last par.	The Plan includes the statement that “The primary constraints to use of the spreading basins are the time periods when they are not available due to either winter storm runoff when the capacity of the basins may be significantly decreased, or during maintenance activities.” Could use of the basins to recharge imported water also limit basin capacity?	The OU2 treated water supply would offset the imported water supply currently used for recharge. No change to the work plan text is necessary.	Please clarify the circumstances in which treated OU2 water could offset the need for imported water.	As discussed, the blending of treated vs imported water for discharge to the spreading basins could be adjusted to increase the overall portion of treated water to imported water thereby reducing the volume of imported water used in discharge to the spreading	Please clarify, if correct, that the phrase treated water refers to treated wastewater used for aquifer recharge, and further explain why this may reduce the volume of imported water used for recharge.	The phrase “treated water” refers to “treated OU2 groundwater,” not “treated wastewater.” If WRD uses treated groundwater in the spreading basins while continuing to use the same amount of treated municipal wastewater, they will reduce the amount of MWD imported water that must be added to the spreading basins. That is a good thing.
Leading Edge Investigation Work Plan (LEI WP)						
LEIWP #2, Pgs. 5-6, starting with 2nd full paragraph	In response to initial comments on Section 2.3 (“Land Use in and around the Leading Edge Area”), SWD representatives proposed revised text in an email dated 11/15/16. The revised text on pages 5 and 6 is acceptable, with the following exceptions: - In the Ashland Chemicals entry, please add a statement referring to the conclusion in the 2010 EPA/CH2M Hill RI report (e.g., “It was not known whether releases from	The SWDs have made selected additional edits to pages 5 and 6, but have concerns regarding the remainder of this request. As noted, we would like to meet to discuss the basis of our concerns. SWDs believe the inclusion of this content in the work plans is important for both technical and policy reasons. Moreover, we do not understand why EPA believes there is a need to develop “a standard regarding the level of evidence needed to label a facility as a potential source.”	We do not think it is appropriate to list, describe, or depict in the Plan other facilities as potential sources (paragraph in revised page 7, sent in December 2016, that begins “In addition to sites listed on these two databases”). We would like to see this paragraph, along with Figure 5 and Table 2 deleted. If Figure 5 and Table 2 are not deleted, and the text continues to refer to	On February 27, 2017, SWDs provided a detailed letter explaining our technical rationale for the inclusion of information on other known or potential sources in or adjacent to the Leading Edge. Per our follow-up discussion on February 28, SWDs have modified the source property language in all the work plans to summarize the technical basis for including the source property discussion. SWDs have also clarified	See proposed changes at end of letter (following this comment and response table). Our changes are intended to: - Remove statements highlighting specific facility investigations. (We do not believe that highlighting specific facilities is necessary or appropriate and are concerned that the statements could be misinterpreted to imply liability.) - Clarify that facilities may have been listed in the 2010 RI Report, GeoTracker or EnviroStor for contaminants other than the Omega Chemical Site COCs. In addition, we request the following	See redline text for SWD changes in Section 2.1 and Section 2.3. In general, these redlines are consistent with SWD redlines to the RDWP. <ul style="list-style-type: none"> In Section 2.1, SWDs do not agree that it is inappropriate to identify previous or ongoing investigations in or adjacent to the LE Area that can be relevant to CD investigation work in the LE Area. [SWDs note that we disagree that listing these known remedial properties infers any specific liability for OU2 LE work.] However, based on EPA’s April 10 email, SWDs have removed the sentence and will address it in the transmittal letter for the Final LEI Work Plan. In Section 2.3, SWDs have agreed to remove the information on each of the bulleted properties although we do not think removal is really necessary – it is a factual statement. SWDs do not agree that the list of properties/facilities

	<p>Ashland Chemical have or have not commingled with contamination in the LE Area). Or delete the discussion of Ashland Chemicals. If the entry remains, clarify whether the release was to soil and/or groundwater.</p> <p>- In the Beaumon Family Trust discussion, clarify whether the facility is located inside or outside of the LE Area. If outside, add a statement to that effect and a statement that it is not known whether releases from the facility have commingled with contamination in the LE Area. Or delete the discussion.</p> <p>- In the PMC discussion, clarify that the facility is located outside of the LE Area and it is not known whether releases from the facility have commingled with contamination in the LE Area. Or delete the discussion.</p> <p>We do not believe that the remainder of the text (revised page 7) belongs in the Plan. The text makes statements about the number of potential sources that we find unnecessary, vague, and potentially misleading. A key problem is that there is not a clear standard regarding the level of evidence needed to label a facility as a “potential source.” We do not think it</p>		<p>facilities under State oversight, the facilities should be limited to those in the LEI Area and described as what they are –facilities overseen by DTSC or the Regional Board and/or facilities listed in EnviroStor and/or GeoTracker - rather than as potential sources. This is consistent with the section title: “Land Use in and around the Leading Edge Area.” The Plan is not the place to make statements about or imply liability. It should also be noted that many of the properties are listed for contaminants other than the chemicals of concern at the Omega Chemical site.</p>	<p>references to known vs. potential sources, responded to specific EPA questions on individual source properties, and further limited the number of identified source properties adjacent to, but outside of, the OU2 boundary. SWDs have not eliminated potential sites based solely on the current identification of contaminants since such information is not definitive for potential sources. Note that for the LEI Work Plan, it is Figure 8, not Figure 5, that illustrates known and potential source properties, and that has been updated.</p>	<p>changes to LEIWP Table 2 and Figure 8:</p> <p>i) Change titles and notes to refer to “facilities included in the GeoTracker database, EnviroStor database, or identified as known or potential sources in the 2010 RI Report.” (Do not refer to facilities as potential sources.)</p> <p>ii) Remove facilities not listed in the 2010 RI Report, GeoTracker, or EnviroStor</p> <p>iii) Include a note that properties listed in GeoTracker and EnviroStor have not necessarily contaminated groundwater, and may be listed for contaminants other than the Omega Chemical site COCs.</p> <p>iv) Include a note that properties included in the 2010 RI Report may be listed for contaminants other than the Omega Chemical Site COCs.</p>	<p>identified by SWDs over the last 5 years as potential sources should be deleted from Table 2 and Figure 8. We believe it is important to keep track of these locations when we are analyzing information from the first two LE Area well clusters and selecting the location of the third cluster. Based on EPA’s April 10 email, we have removed the SWD-identified properties in the Final LEI Work Plan Table 2 and Figure 8 and have attached SWD-s version of the Table and Figure to our transmittal letter.</p>
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	<p>is necessary or worth the effort to develop a standard in support of the Plan.</p> <p>Nor do we believe that it is appropriate to include Table 2 or Figure 5 in the Plan (or the revised Table Y and Figure X provided in November). The table and figure list and show the locations of 220 facilities (121 facilities in the revised table and figure) presented as “potential sources” and described as having the potential to “...adversely impacted regional groundwater in the LE Area.” There is little or no evidence demonstrating that many, and perhaps most, of the 220 facilities are sources of groundwater contamination in the LEI Area.</p> <p>We request that the text on (revised) page 7 be deleted, along with Table 2 and Figure 5. The text is not needed to meet the purpose of Section 2.3 (“Land Use in and around the Leading Edge Area”). Alternatively, a general statement could be made that there has been significant industrial activity in the LE Area over the last several decades, and that there may be additional sources of groundwater contamination not yet identified by EPA or the State.</p> <p>SWD representatives have in the past reported to EPA that they believe there are</p>					
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	additional facilities that should be investigated beyond those currently under DTSC or Water Board oversight. They are free to continue to share their position with EPA but the Plan is not the appropriate place to do so.					
LEIWP #5, Pg. 11, Sec 2.6.2, 2nd bul.	The plan states that "Freon 113 has been infrequently analyzed at sites within OU2 but it was commonly found in soil, soil gas, or groundwater at sites where it was analyzed." Please delete this statement as was done in the final version of the WAMP.	<p>The language has been revised to read as it appears in the approved WAMP with the addition of a sentence at the end of the bulleted paragraph:</p> <p><i>Freon 11 and Freon 113 have not been detected in the LE Area above MCLs. Freon 11 and Freon 113 were known to be used by businesses in OU2 and the types of businesses known to operate currently and historically in OU2 were the types of businesses that frequently utilized Freons. Freons are ubiquitous compounds, and Freon 11 and Freon 113 uses included dry cleaning, cold cleaning electrical parts, vapor phase cleaning, photographic film and magnetic tape cleaning, use in refrigerants, use in blowing agents, use in oil field activities, use in fire extinguishing, and use in propellants. Freon was also commonly found in both automotive and industrial waste oils. Freon 11 or Freon 113 have been found in soil or soil vapor at various properties within OU2 including, but not limited to, the Omega property, the McKesson property, the Chrysler property, and the</i></p>			<p>We continue to object to the last sentence, which singles out specific facilities as Freon users. We request that the sentence be revised as follows: "Freon 11 or Freon 113 has been found in soil and soil vapor at various properties within OU2 including, but not limited to, the Omega property, the McKesson property, the Chrysler property, the Beaumon Family Trust property, and the Patsouras property."</p>	EPA change has been made.

		<i>Patsouras property.</i>				
LEIWP #6, Pg. 11, Sec 2.6.2, 2nd bul.	The plan states that “Freon 11 was more frequently analyzed and was found in at least one environmental medium at those properties where it was tested for.” Please delete this statement as was done in the final version of the WAMP.					
LEIWP #7, Pg. 12, Section 2.6.2	The revised text is acceptable up through “...the Mobil Jalk Fee property...”. Please delete the text that follows. We have not reviewed the CENCO or Beaumon Trust data to determine whether we concur with the statement that these data indicate the presence of source areas in the LE Area. And the last sentence (“SWDs also note that chlorinated solvents were present in the Pioneer wells when they were first tested in 1985, suggesting localized sources.”) does not necessarily mean that there is a source in the LE Area.	The revised text has been further modified and now reads as follows: <i>Examples of elevated PCE or TCE in LE groundwater include areas downgradient of the Continental Heat Treat property, the Mobil Jalk Fee property, and the western edge of the CENCO property. SWDs also note that chlorinated solvents were present in the Pioneer wells when they were first tested in 1985, suggesting that localized sources may contribute to this area.</i> Note that SWDs have discussed the CENCO property with EPA over the last several years including a briefing in 2013 and a detailed letter dated February 29, 2016. Let us know if you would like a copy of this letter.			The revised text in Section 2.6.2 is acceptable if the following change is made: <i>“SWDs also note that chlorinated solvents were present in the Pioneer wells when they were first tested in 1985, suggesting that localized upgradient sources may contribute to this area.”</i>	SWDs have ended the sentence after “first tested in 1985.” This modification has been agreed to by EPA on April 5.
LEIWP #21, Pg. 26, Sec. 4.8, 2nd par.	The text states that well development will continue “until the field personnel under the supervision of a California Licensed Professional Geologist, determines the well has been sufficiently developed.” To the extent practicable, development should continue until the well produces water with a turbidity reading of 10 NTUs	The following text has been appended to the well development discussion: <i>...until the field personnel under the supervision of a California Licensed Professional Geologist, determines the well has been sufficiently developed. To the extent practicable, development will continue until the well produces water with a turbidity reading of 10</i>			Please make the same change proposed for pg. C1-43, Section 11.2 of the PDI WP (i.e., deleting the sentence “Failure to stabilize turbidity will not result in increasing the total purge if other parameters are stable.”)	EPA change has been made.

	or less.	<i>NTUs or less. Failure to stabilize turbidity will not result in increasing the total purge if other parameters are stable.</i>				
LEIWP #B3, Pg. 18, Sec 6.3.3.2, 2nd par.	Please clarify that the turbidity meter listed in Section 6.3.3.1 will be used to monitor water produced during well development. To the extent practicable, development should continue until the well produces water that is at 10 NTUs or less.	The text has been clarified and now reads as follows: <i>Wells will then be surged using a vented surge block, and pumped until the discharge is clear (turbidity ≤ 10 NTUs as measured by a turbidity meter) and sand-free to the extent practicable. Failure to stabilize turbidity will not result in increasing the total purge if other parameters are stable.</i>			Please make the same change as above.	EPA change has been made.
LEIWP #B5, Pg. 29, table	The text states that turbidity is one of the parameters that will be used to indicate that representative water from the aquifer is being produced. However, this table does not include stabilization criteria for turbidity (e.g., +/- 10%). Please revise.	As suggested, a row has been added to this table denoting that turbidity readings should stabilize within a range ± 10%, or if the value is less than 10 NTUs, within a range ± 2 NTUs. For groundwater with low turbidity values, i.e., less than 10 NTUs, stabilization within 1-2 NTUs is typically sufficient. The following footnote has been added to this row: <i>Failure to stabilize turbidity will not result in increasing the total purge if other parameters are stable.</i>			Please make the same change as above.	EPA change has been made.

TABLE 1

LOCATION OF KNOWN AND POTENTIAL SOURCE PROPERTIES, REMEDIAL DESIGN WORK AREA VICINITY

MAP ID	DATABASE ^{1,2,3}	DATABASE ID ⁴	SITE NAME	ADDRESS
1	Geotracker	T0603702858	7-11 #18470	8438 SANTA FE SPRINGS RD, WHITTIER
2	Geotracker	T10000006363	76 FUEL STATION	11651 TELEGRAPH RD, SANTA FE SPRINGS
3	Geotracker	T0603702738	ACI GLASS PRODUCTS	9010 NORWALK BLVD S, SANTA FE SPRINGS
4	Envirostor	19340772	AEROSPACE RIVET	8535 DICE ROAD, SANTA FE SPRINGS
5	Geotracker	SL2041J1510	ALEXANDER BELL PROPERTY	10025 BLOOMFIELD AVE, NORWALK
6	Envirostor	19281186	ALLPURE CHEMICAL COMPANY	11600 PIKE STREET, SANTA FE SPRINGS
7	Geotracker	T0603701579	ALPHA ASPHALT AND COATINGS, CO.	9016 NORWALK BLVD, SANTA FE SPRINGS
8	Geotracker	T0603703811	AMERICAN MEDICAL ENTERPRISES	12508 LAMBERT RD E, WHITTIER
9	Geotracker	T0603701576	AMERICAN SITE SEARS	8230 SORESEN AVE, SANTA FE SPRINGS
10	Geotracker	T0603703931	APEX BULK COMMODITIES (same address as Pacific Truck Equipment)	11655 WASHINGTON BLVD E, WHITTIER
11	Envirostor	71002385	ASSOCIATED PLATING CO.	9636 ANN ST, SANTA FE SPRINGS
12	Envirostor	19750080	ATLAS RADIATOR, INCORPORATED	10110 NORWALK BLVD, SANTA FE SPRINGS
13	Other	NA	B&R FINISHING CO	13560 TELEGRAPH RD, WHITTIER, CA 90605
15	Geotracker	T0603702966	BARRETT SERVICE STATION	8728 NORWALK BLVD, LOS NIETOS
16	Both	60000159	BEAUMON TRUST PROPERTY	12525 PARK AVENUE, SANTA FE SPRINGS
17	Other	NA	BROADWAY CLEANERS	8023 S. BROADWAY, WHITTIER
19	Envirostor	19280224	BURDETT OXYGEN COMPANY OF CALIFORNIA (1)	8832-8838 SOUTH DICE ROAD, SANTA FE SPRINGS
20	Geotracker	T0603702844	C.F. PENG SERVICE STATION (FORMER)	8905 NORWALK BLVD, SANTA FE SPRINGS
21	Geotracker	T0603702962	CAL MAF INC.	11600 WASHINGTON BLVD, WHITTIER
22	Envirostor	19280375	CAL WESTERN PAINTS	11748 SLAUSON AVENUE, SANTA FE SPRINGS
23	Geotracker	SL184701453	CALAVAR CORPORATION	9200 SORESEN AVE, SANTA FE SPRINGS
24	Geotracker	T0603702901	CALIFORNIA CORRUGATED INC.	11600 LOS NIETOS RD E, SANTA FE SPRINGS
25	Envirostor	19340340	CAL-TRON PLATING, INC	11919 EAST RIVERA ROAD, SANTA FE SPRINGS
26	Geotracker	SLT43116114	CATELLUS DEVELOPMENT - LASALLE PROPERTY	12310 SLAUSON AVE, SANTA FE SPRINGS
27	Geotracker	SLT43118116	CATELLUS DEVELOPMENT - NORTH CENTRAL	12202 SLAUSON AVE, SANTA FE SPRINGS
29	Geotracker	T0603702757	CHEVRON #9-5306	12155 TELEGRAPH RD, SANTA FE SPRINGS
30	Geotracker	T0603704877	CHEVRON #9-7441	12376 WASHINGTON BLVD, WHITTIER
31	Geotracker	T0603705030	CIRCLE K LIC DEPT #3064	11462 SLAUSON AVE E, SANTA FE SPRINGS
35	Geotracker	T0603703656	CITY OF SANTA FE SPRINGS F.D.	11736 TELEGRAPH RD E, SANTA FE SPRINGS
36	Envirostor	70000170	CITY OF WHITTIER	7060 ELMER AVE., WHITTIER
37	Other	NA	CLASSIC CLEANERS	12621 E. LAMBERT RD. WHITTIER, CA
38	Other	NA	COMPU-AIRE INC	8167 BYRON RD., WHITTIER 90606
39	Geotracker	T0603701572	CONSOLIDATED DISPOSAL SERVICE	12235 LOS NIETOS RD, SANTA FE SPRINGS
40	Geotracker	T0603713275	DAYTON RICHMOND	9415 SORENSON AVE., SANTA FE SPRINGS
41	Geotracker	T0603705181	DAYTON SUPERIOR	9415 SORESEN AVE S, SANTA FE SPRINGS
42	Geotracker	SLT4309391	DELTA INDUSTRIES	8137 ALLPORT AVE, SANTA FE SPRINGS
43	Geotracker	T0603702963	DIA-LOG CO.	9756 SANTA FE SPRINGS RD S, SANTA FE SPRINGS
44	Envirostor	19490148	DICE ROAD/LOS NIETOS ROAD DUMP	9165 DICE ROAD, SANTA FE SPRINGS
45	RI & Geotracker	SL2041D1505	DIVERSEY CORPORATION (FORMER)	8921 DICE ROAD, SANTA FE SPRINGS
46	Geotracker	T0603704414	E A MENDOZA INC	11574 PERKINS AVE, WHITTIER
47	RI & Envirostor	71002461	EASTMAN KODAK CO.	12100 RIVERA ROAD, WHITTIER
48	RI & Geotracker	T10000006542	ELECTRONIC CHROME AND GRINDING FACILITY	9128-9132 DICE ROAD, SANTA FE SPRINGS
49	RI & Geotracker	T0603703313	FINELINE PAINT CORP.	12200 LOS NIETOS RD E, SANTA FE SPRINGS

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MAP ID	DATABASE ^{1,2,3}	DATABASE ID ⁴	SITE NAME	ADDRESS
51	Envirostor	19330002	FRED RIPPY INC	12471 EAST WASHINGTON BOULEVARD, WHITTIER
52	RI & Geotracker	T0603704927	G & M OIL #16	12559 LAMBERT RD, WHITTIER
53	Geotracker	T0603703013	G & M OIL COMPANY STATION# 66	11770 WASHINGTON BLVD E, SANTA FE SPRINGS
54	Envirostor	71003318	GALAXY BRAZING CO., INC. - SANTA FE SPRINGS	10015 FREEMAN AVENUE, SANTA FE SPRINGS
57	Envirostor	71002819	GOODRICH CORPORATION	11120 S. NORWALK BOULEVARD, SANTA FE SPRINGS
58	Other	NA	GREAT WESTERN CHEMICAL CO	11903 PIKE ST, SFS, CA 90670
59	Geotracker	T0603792924	GUNLOCKE CORPORATION	12468 PUTNAM ST, WHITTIER
61	Other	NA	HARD CHROME PLATING/TOOL & JIG	7635 BALDWIN PLACE, WHITTIER, CA 90602
62	Geotracker	T0603703235	HERITAGE CORPORATE CENTER	10445 NORWALK BLVD S, SANTA FE SPRINGS
63	Geotracker	T0603792971	HOOD CORPORATION YARD	8201 SORENSEN AVE, SANTA FE SPRINGS
65	Envirostor	19240002	IMPERIAL ANCHOR PALLET	12246 PARK AVENUE, SANTA FE SPRINGS
66	Other	NA	IMTECH OF CA	8424 SECURA WAY, SFS CA 90670
67	Envirostor	19820029	JERSEY AVENUE ELEMENTARY SCHOOL	9400 JERSEY AVENUE, SANTA FE SPRINGS
69	Geotracker	T0603704259	JONES CHEVROLET	12560 WHITTIER BLVD, WHITTIER
70	Envirostor	60000908	LAKEVIEW PARK RECREATION FACILITY	JOSLIN STREET AND JERSEY AVENUE, SANTA FE SPRINGS
71	Geotracker	T0603704167	LEGGETT & PLATT	12352 WHITTIER BLVD E, WHITTIER
72	Other	NA	LEWIS INDUSTRIES	10024 GEARY AVE, SFS CA 90670
73	RI & Geotracker	T0603701552	LINCOLN INDUSTRIAL CENTER	12500 SLAUSON AVE E, SANTA FE SPRINGS
74	Both	T0603702688	LIQUID AIR CORP.	8832 DICE RD S, SANTA FE SPRINGS
77	Envirostor	19490147	LOS ANGELES BY-PRODUCTS (NORWALK PIT #2)	9615 SOUTH NORWALK BLVD, SANTA FE SPRINGS
78	Envirostor	71003793	LOS ANGELES SERVICE CENTER	9920 FREEMAN AVE, SANTA FE SPRINGS
79	RI & Geotracker	SL2047K1678	LOS NIETOS BUSINESS CENTER	9120-9160 SOUTH NORWALK BLVD, SANTA FE SPRINGS
80	Geotracker	SLT4301614	LUSK COMPANY	SANTA FE SPRINGS RD., SANTA FE SPRINGS
81	Geotracker	T0603791307	MAR VISTA MOULDING	7343 PIERCE AVE, WHITTIER
82	Other	NA	MERCHANT METALS	12482 E PUTNAM ST, WHITTIER CA 90606
83	Other	NA	MERLE WEST RUG CLEANERS	12430 WHITTIER BLVD, WHITTIER CA
84	RI & Geotracker	SLT43334332	MOBIL - OFRP	10122 NORWALK BLVD, SANTA FE SPRINGS
86	RI & Geotracker	SLT4306967	MODINE MANUFACTURING	12252 WHITTIER BLVD, WHITTIER
88	Other	NA	MORTON CHEMICAL	11244 SLAUSON AND 11733 SLAUSON, WHITTIER CA
89	Other	NA	MOTORCAR PARTS & ACCESSORIES	10430 SLUSHER DR, SFS CA 90670
90	Envirostor	19340755	NEW ENGLAND LEAD COMPANY	12511 EAST PUTNAM STREET, WHITTIER
91	Geotracker	SL0603746411	NIXON-EGLI EQUIPMENT	12030 CLARK ST, SANTA FE SPRINGS
94	Other	NA	PACO PLASTICS	8540 DICE RD, SFS CA 90670
96	Envirostor	19340783	PARKER HANNIFIN	11808 BURKE STREET, SANTA FE SPRINGS
97	Geotracker	T10000000614	PATSOURAS PROPERTY	11630-11700 BURKE STREET, SANTA FE SPRINGS
98	Geotracker	T10000001907	PEDCO	9911 NORWALK, SANTA FE SPRINGS
99	Envirostor	19010012	PENN STREET ELEMENTARY SCHOOL	WHITTIER AVENUE/PENN STREET, WHITTIER
100	Geotracker	T0603701575	PEOPLES DISPOSAL	9525 SANTA FE SPRINGS RD, SANTA FE SPRINGS
101	RI & Geotracker	T0603701549	PETERSON/PURITAN INC	9101 SORENSEN AVE S, SANTA FE SPRINGS
102	Geotracker	T0603704206	PFI INC	9215 SANTA FE SPRINGS RD, SANTA FE SPRINGS
103	Geotracker	T0603705369	PLAS-TAL MFG. CO.	8815 SORENSEN AVE S, SANTA FE SPRINGS
104	Envirostor	19340724	PLATE SHOP, THE	10701 FOREST STREET, SANTA FE SPRINGS
105	Both	SL204751665	PMC SPEC INC	10051 ROMANDEL AVENUE, SANTA FE SPRINGS

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MAP ID	DATABASE ^{1,2,3}	DATABASE ID ⁴	SITE NAME	ADDRESS
109	Envirostor	71002884	PRECISION TUBE BENDING	13626 TALE STREET, SANTA FE SPRINGS
110	Geotracker	T10000003382	PRESBYTERIAN HOSPITAL	12401 WASHINGTON BLVD, WHITTIER
111	Envirostor	71003316	PRESSURE VESSEL SERVICES, INC.	12522 LOS NIETOS ROAD, SANTA FE SPRINGS
112	Geotracker	T0603700212	PRESTON WEED CONTROL	12300 WHITTIER BLVD, WHITTIER
113	Geotracker	T0603704045	PRYOR-GIGGEY COMPANY	12393 SLAUSON AVE, WHITTIER
114	Envirostor	71002243	QUAKER CITY PLATING, LTD.	7937 CHATFIELD AVENUE, WHITTIER
115	Geotracker	T0603702950	R B PAINT & BODY CENTER	11508 WASHINGTON BLVD, WHITTIER
116	Geotracker	T0603792928	RAINBOW CAR WASH	12604 WHITTIER BLVD E, WHITTIER
117	Envirostor	60001332	RIPPY PROPERTY	12468 PUTNAM STREET, WHITTIER
118	Other	NA	RUSS BASSETT CO.	8189 BYRON RD., WHITTIER, CA 90606
119	Other	NA	RUSTY-DUST & TOWEL SERVICE	11779 E SLAUSON AVE, SFS CA
120	Geotracker	T10000000226	S & R CRANE	8503 CHETLE, SANTA FE SPRINGS
122	Other	NA	SANTA FE RUBBER PRODUCTS	12306 E. WASHINGTON BLVD, WHITTIER CA 90606
123	Envirostor	19790005	SANTA FE SPRINGS ATHLETIC FIELDS	PIONEER/JERSEY AVENUE, SANTA FE SPRINGS
124	Other	NA	SANTA FE SPRINGS ENAMELING AND METAL FINISHING	8427 SECURA WAY, SFS CA 90670
125	Geotracker	T0603792936	SHELL	11347 WASHINGTON BLVD, WHITTIER
126	Geotracker	T0603725038	SHELL OIL#204	11515 SLAUSON AVE E., WHITTIER
127	RI	NA	SLEEK CRAFT BOARDS (CHILLER SERVICES, SITE L)	9620 SANTA FE SPRINGS ROAD, SANTA FE SPRINGS, CA 90670
128	Geotracker	T10000000574	SOUTH BAY CHROME	7060 S ELMER AVE, WHITTIER
129	Geotracker	T0603704058	SOUTH PACIFIC STEEL	9835 SANTA FE SPRINGS RD, SANTA FE SPRINGS
130	Geotracker	T0603702663	SOUTHERN CA EDISON	11954 WASHINGTON BLVD E, WHITTIER
131	Geotracker	SLT4305654	SOUTHERN CALIFORNIA EDISON - WHITTIER	SMITH AVE, SANTA FE SPRINGS
132	Geotracker	T0603703625	SOUTHERN STEEL & SUPPLY CO,INC	12350 LOS NIETOS RD, SANTA FE SPRINGS
133	Other	NA	SPOTLESS CLEANERS	11522 E SLAUSON AVE, WHITTIER, CA
135	Geotracker	SLT43332330	STATE FARM INSURANCE	GEARY AVE, SANTA FE SPRINGS
136	Envirostor	60001680	STEVEN LABEL COMPANY	11926 BURKE STREET, SANTA FE SPRINGS
138	Geotracker	T0603703612	SUNRISE LANDSCAPE	12542 CLARK AVE, SANTA FE SPRINGS
139	Other	NA	SUNRISE PROPERTIES	12353 12357 E WHITTIER BLVD, WHITTIER CA
141	Envirostor	80001483	SUR LITE CORP	8124 ALLPORT AVE, SANTA FE SPRING
142	Geotracker	T0603704645	T-CHEM PRODUCTS (same address as KIK Custom Products)	9028 DICE RD S, SANTA FE SPRINGS
143	RI	NA	TECHNICHEM (CLUTCH SYSTEMS, SITE D)	8421 SOUTH CHETLE AVENUE, SANTA FE SPRINGS, CA 90670
144	Geotracker	T0603705188	THIEM INDUSTRIES (FORMER)	8311 SORENSON AVE, SANTA FE SPRINGS
146	Both	19280771	TOXO SPRAY DUST COMPANY	12651 LOS NIETOS ROAD, SANTA FE SPRINGS
148	Envirostor	71003689	TRIDENT PLATING, INC.	10046 ROMANDEL AVENUE, SANTA FE SPRINGS
149	Envirostor	71002167	TROJAN BATTERY CO. - ANN STREET FAC	9440 ANN STREET, SANTA FE SPRINGS
150	Envirostor	71002926	TROJAN BATTERY CO. - CLARK ST FAC	12380 CLARK STREET, SANTA FE SPRINGS
151	Geotracker	T0603703602	TUBE SERVICE COMPANY	9351 NORWALK BLVD S, SANTA FE SPRINGS
152	Geotracker	T0603703812	TUNE TECH	12612 LAMBERT RD E, WHITTIER
153	Other	NA	ULTRA SONIC DEBURRING	8136 BYRON ROAD, WHITTIER CA 90606
154	RI	NA	UNKNOWN TCE SOURCE	NORTH OF WHITTIER ROAD
155	Geotracker	SLT43365363	UNOCAL - CENTRAL S.F.S.O.F.	12404 MCCANN DR, SANTA FE SPRINGS
156	Geotracker	T0603703084	UNOCAL #5091	11808 WASHINGTON BLVD E, SANTA FE SPRINGS
157	Geotracker	T0603703176	UNOCAL #5435	11651 TELEGRAPH RD, SANTA FE SPRINGS

TABLE 1

LOCATION OF KNOWN AND POTENTIAL SOURCE PROPERTIES, REMEDIAL DESIGN WORK AREA VICINITY

MAP ID	DATABASE ^{1,2,3}	DATABASE ID ⁴	SITE NAME	ADDRESS
158	RI & Geotracker	T0603703341	UNOCAL CORPORATION	9645 SANTA FE SPRINGS RD, SANTA FE SPRINGS
159	Geotracker	T0603703174	US GYPSUM CO.	9306 SORENSEN AVE, SANTA FE SPRINGS
160	RI & Geotracker	T0603702897	VALVOLINE OIL COMPANY	9520 JOHN ST S, SANTA FE SPRINGS
161	Envirostor	19340728	WASHINGTON PLATING, INC	7060 ELMER AVENUE, WHITTIER
162	RI & Envirostor	19490194	WASTE DISPOSAL, INC.	12731 LOS NIETOS RD, SANTA FE SPRINGS
163	RI & Envirostor	19340439	WEST BENT BOLT	8623 SOUTH DICE ROAD, SANTA FE SPRINGS
165	Geotracker	T0603703000	WESTERN GALVANIZING CORP.	9719 SANTA FE SPRINGS RD S, SANTA FE SPRINGS
166	Envirostor	19340377	WESTERN SCREW PRODUCTS #1	11770 EAST SLAUSON AVENUE, SANTA FE SPRINGS
167	Envirostor	19270327	WHITTIER ENGRAVING COMPANY	12631, 12633, 12637 LOS NIETOS ROAD, SANTA FE SPRINGS
168	Envirostor	80001584	WHITTIER PLATING CO.,INC.	11642 E PIKE ST, SANTA FE SPRINGS
169	Other	NA	WITCO CORP	8733 S DICE RD, SFS CA 90670
170	Geotracker	SLT4L7671866	YELLOW FREIGHT SYSTEMS	12250 EAST CLARK AVE., SANTA FE SPRINGS

¹ Geotracker, Envirostor or Both: Downloaded databases on July 11, 2016 from followings sites: http://geotracker.waterboards.ca.gov/data_download.asp and http://www.envirostor.dtsc.ca.gov/public/data_download.asp.

² Other sites identified based on review of historical state and local agency records including but not limited to the South Coast Air Quality Management District, the Los Angeles Department of Public Works, the Santa Fe Springs Fire Department, the Los Angeles County Fire Department, the Los Angeles County Engineer.

³ RI indicates source/potential source sites that were discussed in the RI Report (CH2M Hill, 2010) and does not include OU2 Special or General Notice Sites.

⁴ Database ID provides the identification number from the Geotracker or Envirostor databases. Database identifiers are not applicable to RI sites or Other sites.

ACRONYMS

NA Not Applicable

RI Remedial Investigation

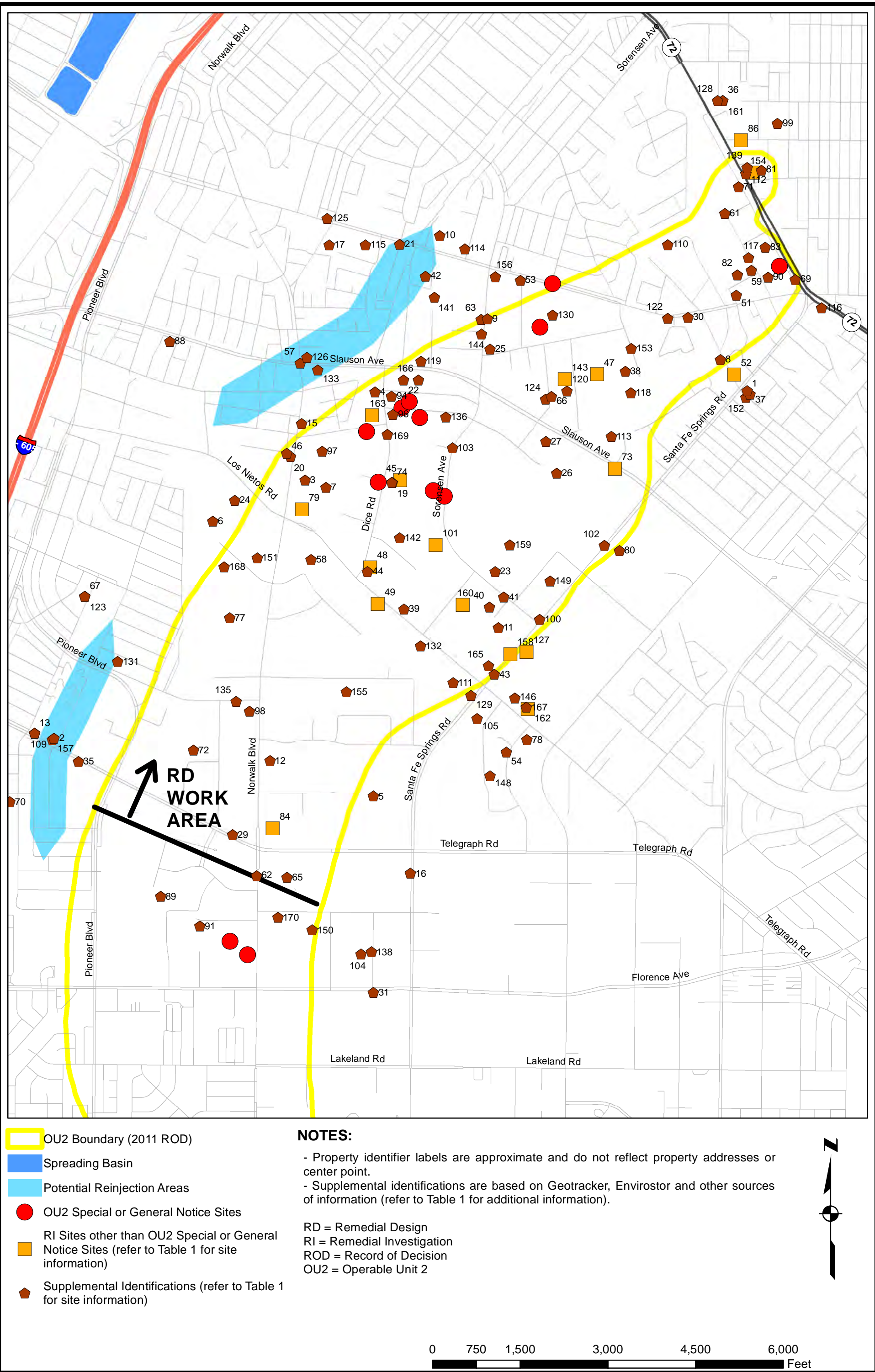


FIGURE 5. LOCATION OF KNOWN AND POTENTIAL SOURCE PROPERTIES, REMEDIAL DESIGN WORK AREA VICINITY

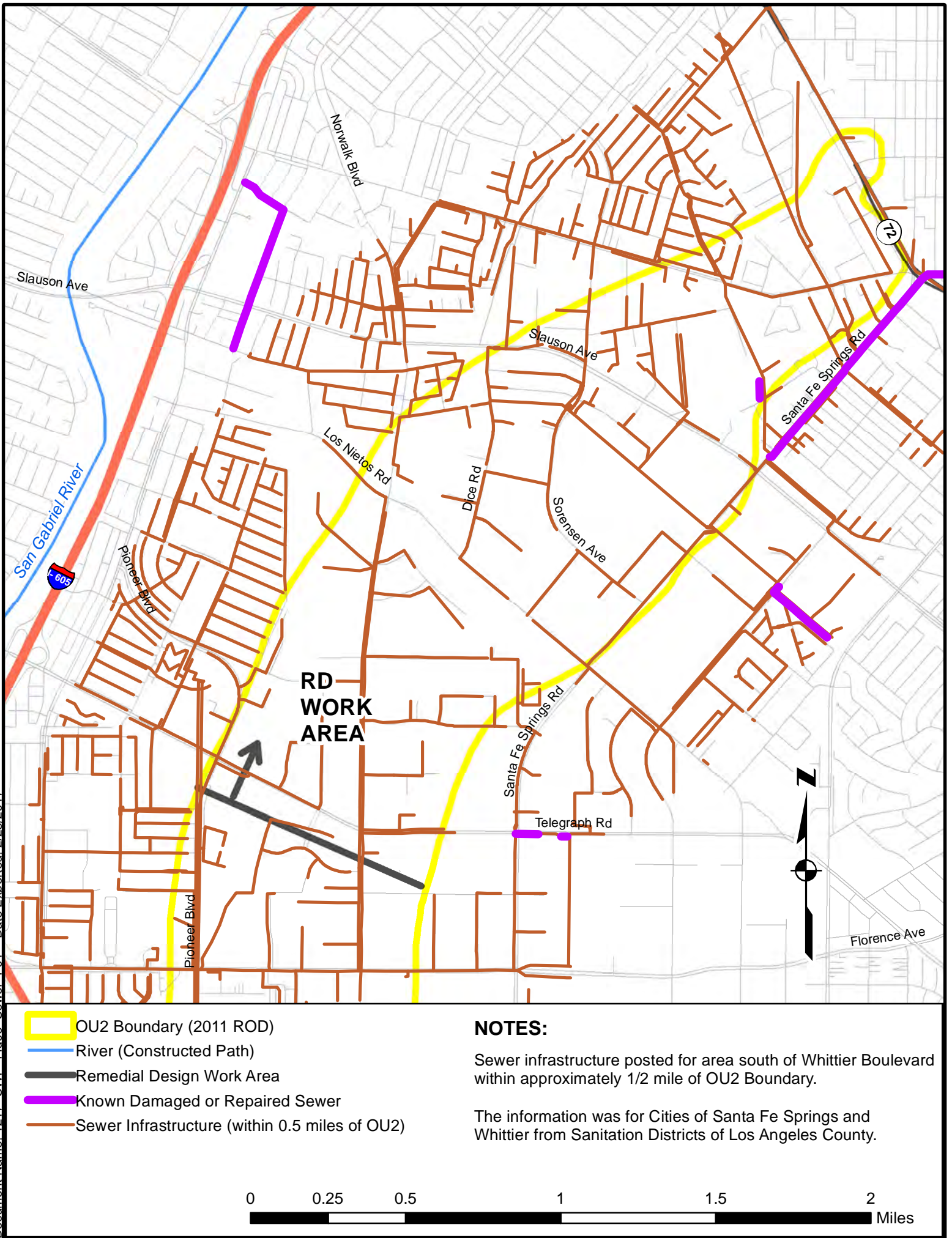


FIGURE 6. SEWER INFRASTRUCTURE, REMEDIAL DESIGN WORK AREA VICINITY

TABLE 2

LOCATION OF KNOWN AND POTENTIAL SOURCE PROPERTIES, LEADING EDGE INVESTIGATION AREA VICINITY

MAP ID	DATABASE ^{1,2,3}	DATABASE ID ⁴	SITE NAME	ADDRESS
2	Geotracker	T10000006363	76 FUEL STATION	11651 TELEGRAPH RD, SANTA FE SPRINGS
13	Other	NA	B&R FINISHING CO	13560 TELEGRAPH RD, WHITTIER, CA 90605
14	Geotracker	T0603701550	BAKER PETROLITE CORPORATION (same address as Baker Performance Chemicals)	11808 BLOOMFIELD AVE S, SANTA FE SPRINGS
16	Both	60000159	BEAUMON TRUST PROPERTY	12525 PARK AVENUE, SANTA FE SPRINGS
18	Geotracker	T0603701574	BROTHERS AUTO	10801 NORWALK BLVD, SANTA FE SPRINGS
28	Geotracker	T0603705376	CHARLES L GODBEY	10840 NORWALK BLVD S, SANTA FE SPRINGS
29	Geotracker	T0603702757	CHEVRON #9-5306	12155 TELEGRAPH RD, SANTA FE SPRINGS
31	Geotracker	T0603705030	CIRCLE K LIC DEPT #3064	11462 SLAUSON AVE E, SANTA FE SPRINGS
32	Geotracker	T0603703815	CITY OF NORWALK	12700 NORWALK BLVD S, NORWALK
33	Geotracker	T0603702900	CITY OF NORWALK MAINT. YARD	12735 CIVIC CENTER DR, NORWALK
34	Envirostor	19070002	CITY OF NORWALK TRANSPORTATION YARD	12737 CIVIC CENTER DRIVE, NORWALK
35	Geotracker	T0603703656	CITY OF SANTA FE SPRINGS F.D.	11736 TELEGRAPH RD E, SANTA FE SPRINGS
50	Geotracker	T0603703125	FIRESTONE	12225 IMPERIAL HWY E, NORWALK
55	Geotracker	T0603701573	GEMINIS PROPERTY DEVELOPMENT	11212 NORWALK S, SANTA FE SPRINGS
56	Geotracker	T0603793031	GOLDEN SHELL	12843 NORWALK BLVD S, NORWALK
60	Both	SL2045G1620	HALLIBURTON ENERGY SERVICES (FORMER)	12320 SOUTH BLOOMFIELD AVE, SANTA FE SPRINGS
62	Geotracker	T0603703235	HERITAGE CORPORATE CENTER	10445 NORWALK BLVD S, SANTA FE SPRINGS
64	Geotracker	T0603704155	IBM BUILDING	12501 IMPERIAL HWY E, NORWALK
65	Envirostor	19240002	IMPERIAL ANCHOR PALLET	12246 PARK AVENUE, SANTA FE SPRINGS
68	Geotracker	SLT43330328	JOHN ALEXANDER CO.	12040 E. FLORENCE AVE, SANTA FE SPRINGS
70	Envirostor	60000908	LAKEVIEW PARK RECREATION FACILITY	JOSLIN STREET AND JERSEY AVENUE, SANTA FE SPRINGS
75	Geotracker	T0603704049	LITTLE LAKE CITY SCHOOL DIST.	10515 PIONEER BLVD S, SANTA FE SPRINGS
76	Other	NA	LITTLE LAKE DEVELOPMENT	12046 FLORENCE AVE, SFS CA 90670
84	RI & Geotracker	SLT43334332	MOBIL - OFRP	10122 NORWALK BLVD, SANTA FE SPRINGS
85	Geotracker	T0603702703	MOBIL #11-F20	12616 IMPERIAL HWY, NORWALK
87	Geotracker	T0603704599	MONTGOMERY WARDS	12051 IMPERIAL HWY E, NORWALK
89	Other	A040	MOTORCAR PARTS & ACCESSORIES	10430 SLUSHER DR, SFS CA 90670
91	Geotracker	SL0603746411	NIXON-EGLI EQUIPMENT	12030 CLARK ST, SANTA FE SPRINGS
92	Envirostor	19280515	NO (SAME ADDRESS AS NEVILLE CHEMICAL)	12800 IMPERIAL HWY, SANTA FE SPRINGS
93	Geotracker	SL2046D1645	NORWALK, CITY OF	13900 NORWALK BLVD, NORWALK
95	Other	NA	PALACE CLEANERS	12307 NORWALK BLVD, NORWALK, CA
104	Envirostor	19340724	PLATE SHOP, THE	10701 FOREST STREET, SANTA FE SPRINGS
106	Envirostor	19300236	POLYMER CONCEPTS	12830 IMPERIAL HIGHWAY, SANTA FE SPRINGS
107	RI & Geotracker	SL372492442	POWERINE OIL CO	12345 LAKELAND RD, SANTA FE SPRINGS
108	Other	NA	PRECISION CONTROL FINISHING	12150 S. BLOOMFIELD AVE, SFS CA 90670
109	Envirostor	71002884	PRECISION TUBE BENDING	13626 TALE STREET, SANTA FE SPRINGS
121	Geotracker	T0603701577	S E PIPELINE CONSTRUCTION CO	11832 BLOOMFIELD AVE, SANTA FE SPRINGS
134	Envirostor	19990018	STANKOVICH II	12601 BLOOMFIELD, SANTA FE SPRINGS
137	Geotracker	T0603704722	STRECKER CONSTRUCTION CO	11922 BLOOMFIELD AVE, SANTA FE SPRINGS
138	Geotracker	T0603703612	SUNRISE LANDSCAPE	12542 CLARK AVE, SANTA FE SPRINGS
140	Geotracker	T0603704119	SUPERIOR OIL TOOL	12180 FLORENCE AVE E, SANTA FE SPRINGS
145	Geotracker	T0603705012	TOSCO - 76 STATION #6916 (FORMER)	12205 IMPERIAL HWY E, NORWALK
147	Geotracker	T0603703940	TRANSIT MIXED CONCRETE COMPANY	12222 FLORENCE AVE E, SANTA FE SPRINGS

TABLE 2

LOCATION OF KNOWN AND POTENTIAL SOURCE PROPERTIES, LEADING EDGE INVESTIGATION AREA VICINITY

MAP ID	DATABASE ^{1,2,3}	DATABASE ID ⁴	SITE NAME	ADDRESS
150	Envirostor	71002926	TROJAN BATTERY CO. - CLARK ST FAC	12380 CLARK STREET, SANTA FE SPRINGS
157	Geotracker	T0603703176	UNOCAL #5435	11651 TELEGRAPH RD, SANTA FE SPRINGS
164	Other	NA	WESTERN ALLIED	12046 E FLORENCE AVE, SFS CA 90670
170	Geotracker	SLT4L7671866	YELLOW FREIGHT SYSTEMS	12250 EAST CLARK AVE., SANTA FE SPRINGS

¹ Geotracker, Envirostor or Both: Downloaded databases on July 11, 2016 from followings sites: http://geotracker.waterboards.ca.gov/data_download.asp and http://www.envirostor.dtsc.ca.gov/public/data_download.asp.

² Other sites identified based on review of historical state and local agency records including but not limited to the South Coast Air Quality Management District, the Los Angeles Department of Public Works, the Santa Fe Springs Fire Department, the Los Angeles County Fire Department, the Los Angeles County Engineer.

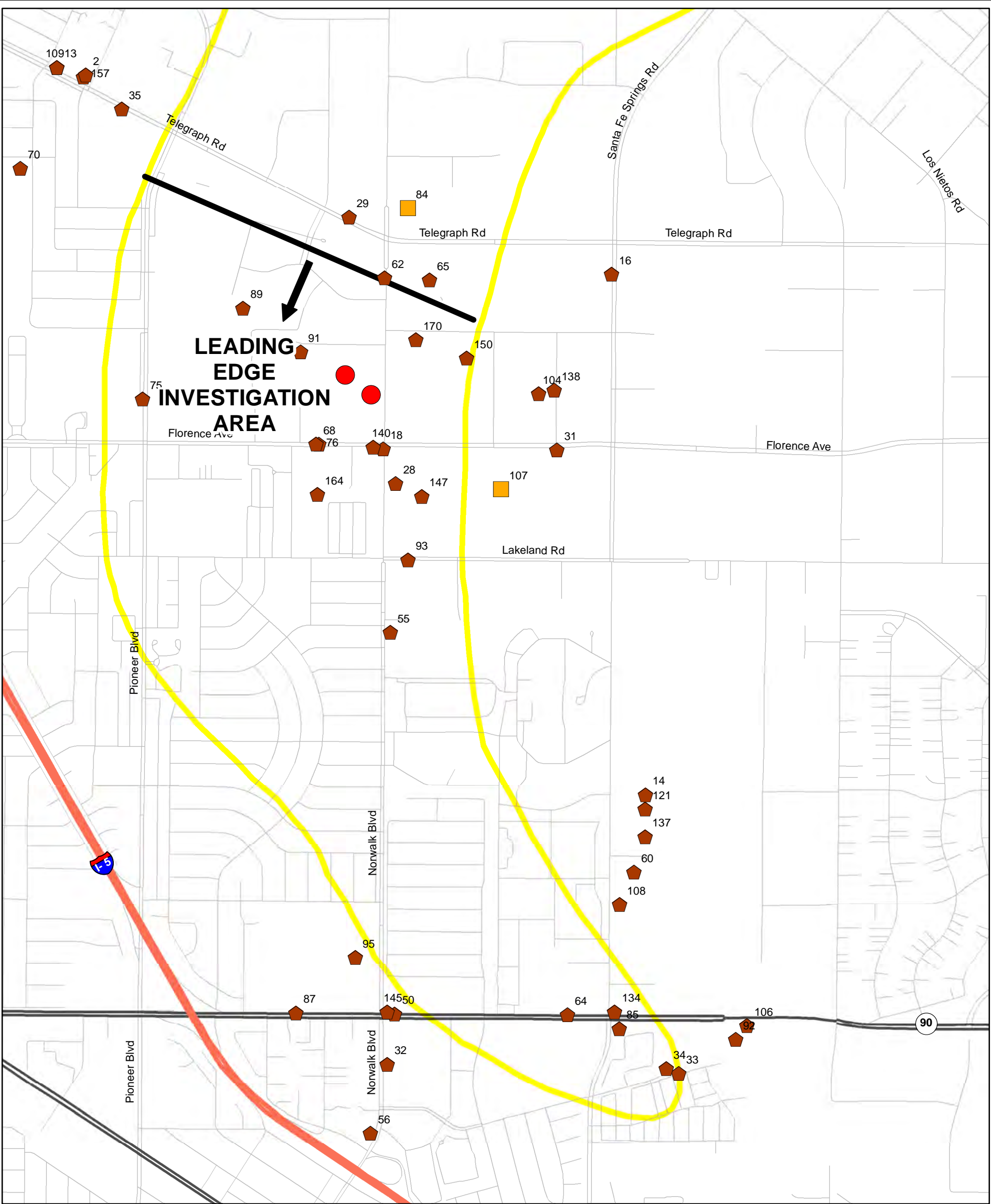
³ RI indicates source/potential source sites that were discussed in the RI Report (CH2M Hill, 2010) and does not include OU2 Special or General Notice Sites.

⁴ Database ID provides the identification number from the Geotracker or Envirostor databases. Database identifiers are not applicable to RI sites or Other sites.

ACRONYMS

NA Not Applicable

RI Remedial Investigation



- OU2 Boundary (2011 ROD)
- OU2 Special or General Notice Sites
- RI Sites other than OU2 Special or General Notice Sites (refer to Table 1 for site information)
- Supplemental Identifications (Refer to Table 1 for site information)

NOTES:

- Property identifier labels are approximate and do not reflect property addresses or center point.
- Supplemental identifications are based on Geotracker, Envirostor and other sources of information (refer to Table 1 for additional information).

OU2 = Operable Unit 2
RI = Remedial Investigation
ROD = Record of Decision

FIGURE 8. LOCATION OF KNOWN AND POTENTIAL SOURCE PROPERTIES, LEADING EDGE INVESTIGATION AREA VICINITY